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ABSTRACT

This career exploration instructional unit is one of several resulting from the rural southwestern Colorado CEPAC Project (Career Education Process of Attitude Change). Using the construction of a dog house to give meaning to measurement skills and area computation, the unit includes (1) five behavioral objectives, the teaching strategy, the specific basic skills being taught, and the evaluation method and (2) five activities for students to perform in planning the dog house and ordering the necessary materials. Because this unit is part of a career education laboratory program, a two-page overview of the goals, objectives, personnel organization, target group (fifth and sixth graders), materials, budget, timeline, and evaluation relative to the whole program is included. An occupational brief chart for students to use in summarizing the key factors regarding an occupation is appended. (EM)

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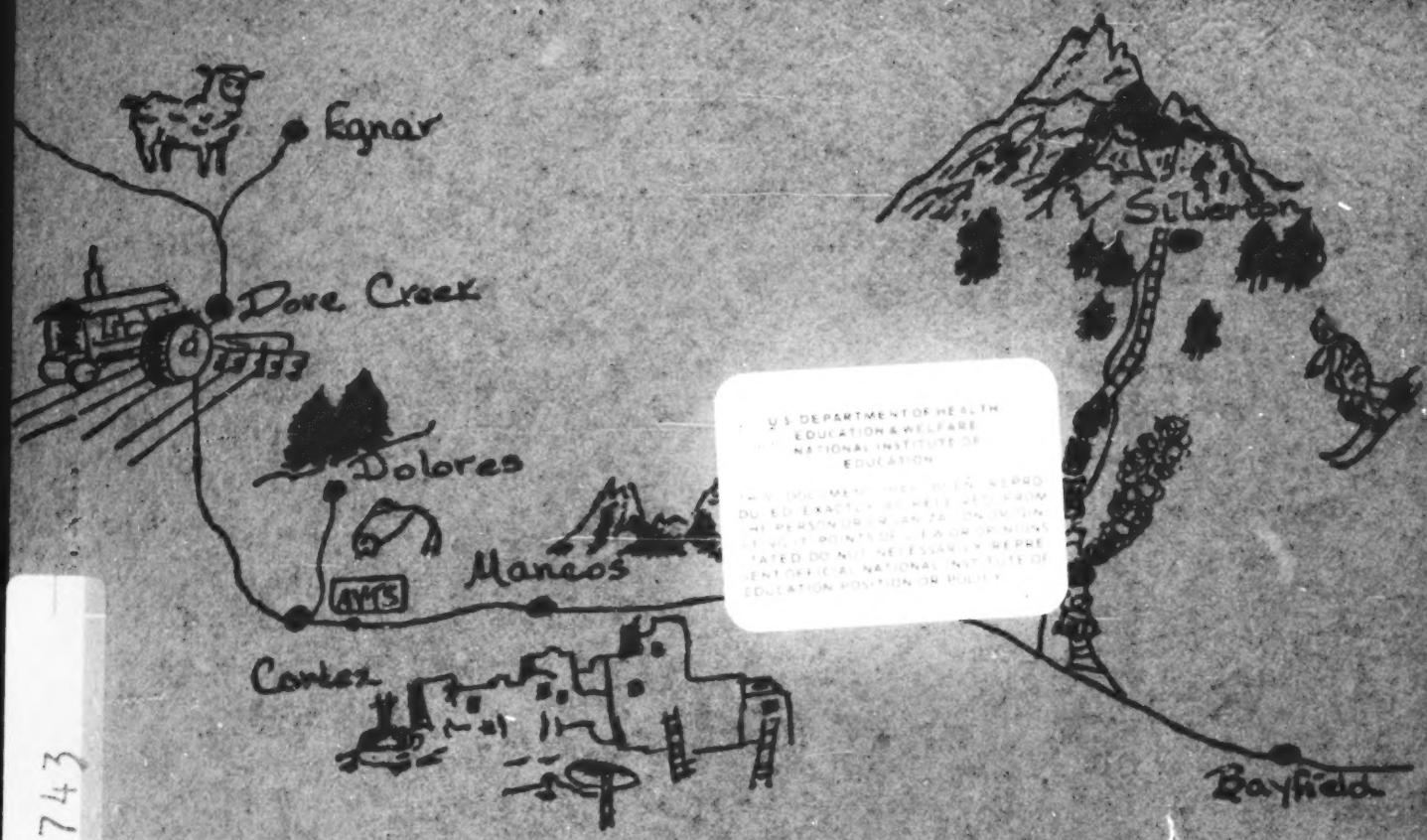

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CAREER UNIT

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Math and the Dog House

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CEPAC: Career Education-
A Process of Attitude Change

San Juan Basin Area
Vocational-Technical School
Cortez Colorado

CE 011 695

FOREWARD

This arithmetic unit was prepared by Wayne Peterson and taught in his classroom as part of a comprehensive career education program. The CEPAC Career Education Project is a consortium in Southwestern Colorado administered through the San Juan Basin Area Vocational-Technical School including the school districts of:

Dolores RE-4A, Dolores, Colorado
Mancos RE-6, Mancos, Colorado
Dolores County RE-1J, Dove Creek, Colorado
San Juan County No. 1, Silverton, Colorado
Egnar No. 18, Egnar, Colorado
Montezuma-Cortez RE-1, Cortez, Colorado
Bayfield 10Jt-R, Bayfield, Colorado

The reader should note that the career education unit presented here was developed for a particular class and may or may not be adaptable to all situations. This material has been reproduced so that others may benefit from the endeavors of the author and the Career Education Project.

This publication was the result of cooperative efforts of ESEA Title III through the Colorado State Department of Education and Vocational Education Part D Exemplary through the Colorado State Board for Community Colleges and Occupational Education.

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Career Education
Arithmetic Lesson
The Dog House
6th Grade

Goal: The learner will use the construction of a dog house to give meaning to measurement skills and area computation.

Objectives: The learner will determine an appropriate size for a dog house adequate for a large dog.

The learner will determine the appropriate measurements for the dog house.

The learner will conduct research into the price of materials.

The learner will draw accurate diagrams of the dog house to scale.

The learner will compute the area of the dog house in order to determine the correct amount of paint.

Strategy: This is a buddy system, problem-solving method aimed at practical application of arithmetic skills.

Specific Basic Skills: Measurement, area computation, total price computation.

Activity: (See enclosure)

Evaluation: Satisfaction of the teacher.

Bob wants to build a dog house. He wants to build a large dog house for a large dog. You are going to help him plan the dog house and order the material.

A. How large should the dog house be?

Width of the front _____

Height of the front _____

Height from wall to gable _____

Length of the side _____

Height of the side _____

Width of roof _____

Length of roof _____

Width of floor _____

Length of floor _____

Width of door _____

Height of door _____

B. Draw a plan of the dog house. Show a side view, a front view, a back view, a top view, and a bottom view.

C. Develop your material's order. Remember to double certain measurements.

Length		Price	Total Cost
_____	2 x 4's	_____	_____
_____	1 x 6's	_____	_____

Amount	Size		Price	Total Cost
_____	____	nails	_____	_____
_____	____	nails	_____	_____

Amount		Price	Total Cost
_____	paint	_____	_____
_____	paint	_____	_____

D. To compute the amount of paint that you will need, you need to know certain areas. Remember to double certain measurements.

	Length		Width		Area
Sides	_____	x	_____	=	_____
Roof	_____	x	_____	=	_____
Front	_____	x	_____	=	_____
Back	_____	x	_____	=	_____
Floor	_____	x	_____	=	_____

If you use two coats of paint, double your order ..

E Total Cost

Wood _____

Nails _____

Paint _____

Total _____

Career Education

Laboratory Program

5th and 6th Grades

Goals: The learners will participate in construction cluster activities to become aware of construction skills through exploratory lessons.

The learners will participate in homemaking cluster activities to become aware of homemaking skills through exploratory lessons.

Objectives: The learners will make a product choice, shop for materials, produce the product, price the product, and market it.

The learner will explore the cluster with hands on experiences.

Personnel Organization: The learners will be taught by 5th and 6th grade teachers in a laboratory room adjacent to the sixth grade classroom. Special class time will be utilized.

Target Group: Fifth and sixth grades.

Materials: Carpentry tools, stove, refrigerator, pots and pans, food ingredients, money, volunteer equipment.

Budget:

Tools and kitchen equipment	$ 75.00
Food	100.00
Construction material	75.00
Miscellaneous	50.00
	$300.00

Timeline: The career education will continue through the school year 1974-75 and then it will be evaluated.

Evaluation: During May 1975, the career education laboratory program will be evaluated in terms of student involvement, quality products, and learner achievement.

Audio-Visual Display

Occupational Brief Chart

Procedure: Use the following format and assign the completion of the chart by the pupils.

Occupation: _____

Salary _____

Requirements or Qualifications: _____

_____

_____

Attitudes, Knowledge or Skills: _____

_____

_____

Advantages: _____

_____

_____

Disadvantages: _____

_____

_____

Importance of Occupation: _____

_____

_____

Related Occupations: _____

_____

_____

Special Interests. _____

_____

_____

Preparation:

Grade School _____

Junior High School _____

High School _____

Post High School _____

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